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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,647	10/05/2001	Hiroki Fukuoka	214675US-2CONT	2601
22850 7590 08/13/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER JERABEK, KELLY L	
			ART UNIT 2622	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/970,647

Applicant(s)

FUKUOKA, HIROKI

Examiner

Kelly L. Jerabek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 75 and 82-87 is/are allowed.
- 6) ☒ Claim(s) 17-22, 25, 29-51, 54, 58-74 and 76-81 is/are rejected.
- 7) ☒ Claim(s) 23, 24, 26-28, 52, 53 and 55-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 08/535,562.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/14/2007 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-19, 22, 25, 29-40, 45-48, 51, 54, 58-69, 74 and 76-81 are rejected under 35 U.S.C. 103(a) as being anticipated by Yamagami et al. US 5,535,011 in view of Kuroiwa JP 06-022189.

Re claim 46, Yamagami discloses in figures 1 and 7 a digital electronic camera system comprising a digital electronic camera (100) including a lens (1), and an electronic image pick-up sensor (6) for receiving images through the lens (col. 3, line 52 – col. 4, line 7; col. 20, lines 29-39; figs. 5-7). The electronic camera system also includes a first input/output interface (110) for interfacing an extended card (111) to the image pick-up sensor (6) (col. 4, lines 8-13) and a second input/output interface (104) for interfacing a memory card (101) to the image pick-up sensor (6) (col. 3, line 60 – col. 4, line 7). Yamagami further discloses in a fourth embodiment that a program of the BIOS level of the RISC CPU (701) of the card means (111) is written in the memory card (101) connected to the second input/output interface (104) (col. 20, lines 29-67). Thus, the second input/output interface (104) receives a card (101) that stores a control program. The electronic camera system also includes a processor (CPU13) for controlling the card means (101) through the second input/output interface (104) (col. 3, line 60-col.4, line 7), for connecting to the electronic image pick-up means (6), and for controlling the first input/output interface (111) (col. 7, line 50-col. 9, line 41). Yamagami further discloses in a fourth embodiment that a program of the BIOS level of the RISC CPU (701) is written in the memory card (101) connected to the second input/output interface (104). Yamagami also states that the contents (programs) of the memory card (101) are transferred to the extended card (111) thorough the first input/output interface (110) and the second input/output interface (104) (col. 20, lines 40-53). Thus, it can be seen that Yamagami discloses a processor means (CPU 13) for

controlling the card means (101) through the second input/output interface (104), and configured to transfer the control program (BIOS level program) to a memory (RAM 702 in card 111), the control program including a communication control program (BIOS level program) for controlling the first input/output interface (110), wherein the communication control program is configured to enable communication with an external device (112) through the first input/output interface (110) (col. 20, lines 29-67).

Although the Yamagami reference discloses the above limitations, it fails to distinctly disclose that a memory means **in the camera** receives the communication control program (BIOS level program) from a card and the processor in the camera processes the control program received from the card.

Kuroiwa discloses a camera that includes a control program stored on a card (17) which is then transferred to a RAM (21) of the camera. Next, the transferred program is executed and the control section (19b) performs the control of each circuit based on both of the programs. Thus, when a photographer desires the addition of additional functions, the additional functions may be loaded onto the camera from a memory card that stores a program including the additional functions (Kuroiwa: Constitution). Therefore, it would have been obvious for one skilled in the art to have been motivated to store the communication control program transferred from an external recording medium as disclosed by Yamagami in an internal memory of a camera by using the teaching of storing a program provided by an external card in an internal camera memory as disclosed by Ishikawa. Doing so would provide a means for adding functions (the communication program disclosed by Yamagami) to the camera

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and altering functions corresponding to various needs by individual users (Kuroiwa: Constitution).

Re claim 47, Yamagami states that the first input/output interface (110) includes a memory card (111) connected to the image pick-up sensor (6) (col. 4, lines 14-32).

Re claim 48, Yamagami states that the memory card (111) conforms with the specifications of PCMCIA memory cards (col. 4, lines 1-7).

Re claim 51, Yamagami states that the second input/output interface (104) receives a communication card (101) for communicating information into and out of the digital image capturing device (information transmitted via memory bus controller 102) (col. 20, lines 29-67).

Re claim 54, Yamagami states that the electronic camera system disclosed by Yamagami includes a memory bus controller (102) for transfer of image and sound data between the processor (13) and a communication card (101) (col. 4, lines -7).

Therefore, the memory bus controller (102) serves as a common bus that is directly connected to both the first input/output means (110) and the second input/output means (104).

Re claim 58, Yamagami also includes a video output part (23) (fig. 5; col. 4, lines 61-64). The connection between the camera and the video output part (23) serves as a communication line because it sends an analog video signal to be displayed at the video output part (23) and does so without connection to an input/output card.

Re claim 59, Yamagami discloses all of the limitations of claim 46 above. Additionally, Yamagami also includes a video output part (23) (col. 4, lines 61-64). The connection between the camera and the video output part (23) serves as a communication line because it sends an analog video signal to be displayed at the video output part (23) and does so without connection to an input/output card. However, Yamagami does not state that the display is a television. However, the examiner takes **Official Notice** that it is well known in the art for video information to be displayed on a television. It would have been obvious to one of ordinary skill in the art at the time of invention for the digital electronic camera system disclosed by Yamagami to display the analog video information on a television that is part of the video output part (23).

Re claim 60, Yamagami states that the memory bus controller (102) which serves as a card interface circuit means is also connected between the processor (13) and the first input/output interface (110) for interfacing to a device (111) that is external to the digital image capturing device (col. 4, lines 1-7).

Re claim 61, Yamagami states that when an instruction is given for shooting and recording, the processor (13) controls the memory bus controller (102) to cause image data to be recorded on the recording medium (101) through the recording medium I/F interface (104) (col. 5, lines 10-27). Therefore, the memory bus controller (102) serves as a card interface circuit means connected between the processor (13) and the second input/output interface (104) for interfacing to a device (101) that is external to the image-capturing device.

Re claims 62-65, Kuroiwa discloses a camera including an interface for accepting a card (17) that stores a control program. The camera includes a memory (RAM 21) for receiving the control program from the card (17) and a processor (control circuit 19) for processing the control program to control the card means and operate the camera in accordance with the received program (Kuroiwa: Constitution).

Re claim 66, Yamagami discloses a motion image compressing/expanding circuit (608) for carrying out a compressing or decompressing process in real time (col. 19, lines 30-49).

Re claim 67, Yamagami states that when sound data recorded on the recording medium (101) consists of compressed sound data, the sound data is expanded (col. 11, lines 28-49). Therefore, it can be seen that compressed sound data received from a

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memory card (101) connected to the second interface (104) is decompressed if necessary.

Re claim 68, Yamagami states that the electronic camera system is capable of controlling mechanical, operation, and operation display parts related to shooting in accordance with instructions given from the host computer (112) through an external bus (401). An instruction coming through the external bus (401) is sent to the operation part control CPU (4) and the instruction is carried out by the operation part control CPU (4) (col. 16, lines 47-67). Therefore, the operation part control CPU (4) can be read as a memory means for receiving a control program (data) from a source outside of the digital imaging capturing device since it receives instructions from an external host computer (112) and carries out the instructions. The data received from the external host computer (112) includes exposure controlling information (col. 16, lines 61-67).

Re claim 69, see claim 68.

Re claim 74, Yamagami states that the DSP (202) reads out the compressed image data from the recording medium (101) by controlling the recording medium interface (104) (col. 11, lines 10-27). Therefore, since the DSP (202) is a processor it can be read as a computer and it has a memory card reading means for reading the memory card (101) containing image captured from the digital image capturing device.

Re claim 17, see claim 46.

Re claim 18, see claim 47.

Re claim 19, see claim 48.

Re claim 22, see claim 51.

Re claim 25, see claim 54.

Re claim 29, see claim 58.

Re claim 30, see claim 59.

Re claim 31, see claim 60.

Re claim 32, see claim 61.

Re claim 33, see claim 62.

Re claim 34, see claim 63.

Re claim 35, see claim 64.

Re claim 36, see claim 65.

Re claim 37, see claim 66.

Re claim 38, see claim 67.

Re claim 39, see claim 68.

Re claim 40, see claim 69.

Re claim 45, see claim 74.

Re claims 76 and 79, Yamagami states that the first input/output interface (110) is for connection to a communication line which is external to the digital image capturing system (the extended card 111 connects the camera to an external communication line) (col. 4, lines 8-13) and the second input/output interface (104) is for connection to a card (101) which is a removable memory card (col. 3, line 60 – col. 4, line 7).

Re claims 77 and 80, Yamagami states that the first input/output interface (110) is for connection to a communication line through a removable communication card (111) (col. 4, lines 8-13).

Re claims 78 and 81, Yamagami states that the second input/output interface (104) is further configured to communicate images captured by the image capturing system to the removable memory card (101) col. 3, line 60-col. 4, line 7).

Claims 20-21 and 49-50 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagami et al. in view of Kuroiwa and further in view of Silverbrook US 5,430,496.

Re claim 49, the combination of the Yamagami and Kuroiwa references discloses all of the limitations of claims 18 and 47 above. Specifically, Yamagami states that states that the first input/output interface (110) includes an extended card (111) connected to the image pick-up sensor (6) (col. 4, lines 14-32). The card (111) conforms with the specifications of PCMCIA memory cards (col. 4, lines 1-7). However, Yamagami in view of Kuroiwa fails to distinctly state that the first input/output interface is for receiving a memory card for storing information according to a JEIDA standard.

Silverbrook discloses a portable video animation device that includes a memory card (17) and a memory card reader (10). Silverbrook states that it is well known in the art for memory cards conform to both JEIDA and PCMCIA standards (col. 3, lines 51-

62). Silverbrook also states that each memory card (17) can be used as ROM devices but can also be either flash EPROM or static RAM (col. 3, lines 59-62). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a memory card that conforms to both JEIDA and PCMCIA standards and can also be a flash EPROM to store images as disclosed by Silverbrook in the digital electronic camera system disclosed by Yamagami in view of Kuroiwa. Doing so would provide a means for storing images on a memory card conforming to both JEIDA and PCMCIA standards (Silverbrook: col. 3, lines 51-54).

Re claim 50, see claim 49.

Re claim 20, see claim 49.

Re claim 21, see claim 49.

Claims 41-42 and 70-71 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagami et al. in view of Kuroiwa and further in view of Sasaki et al. US 5,018,017.

Re claim 70, the combination of the Yamagami and Kuroiwa references discloses all of the limitations of claims 17 and 46 above. Specifically, Yamagami states that image data is recorded on a PCMCIA memory card (101) via the second input/output

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interface (104) (col. 5, lines 11-27). However, Yamagami in view of Kuroiwa fails to distinctly state that date information related to the captured image is also output to the memory card (101).

Sasaki discloses in figure 1 an electronic still camera (10) including a memory card (15) for storing images and information relating to the images. Figures 9A-9E explain a method of storing data into the memory card (15). Specifically, figure 9B shows the various items stored in the directory area. This information can include date information related to the captured image (col. 9, lines 35-61). Therefore, it would have been obvious for one skilled in the art to have been motivated to include the memory card capable of storing date information related to a captured image as disclosed by Sasaki in the digital electronic camera system including a memory card as disclosed by Yamagami in view of Kuroiwa. Doing so would provide a means for storing information indicating the date that image recording was affected (Sasaki: col. 9, lines 55-61).

Re claim 71, see claim 70.

Re claim 41, see claim 70.

Re claim 42, see claim 70.

Claims 43-44 and 72-73 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagami et al. in view of Kuroiwa and further in view of Crawford US 5,771,354.

Re claim 72, the combination of the Yamagami and Kuroiwa references discloses all of the limitations of claims 17 and 46 above. Specifically, Yamagami states that image data that is recorded on the recording medium (101) is transferred to a host computer (112). The image data is transferred to the host computer (112) by an external interface controller (207) located within an extended card (111) (col. 11, lines 50-67). Therefore, it can be seen that image data stored in the recording medium (101) is transferred through a second interface means (104) to a bus controller (102), then the image data is transferred from the bus controller (102) to a first interface means (110) and to a bus controller (206) and an external interface controller (207) located in a communication card (111). Thus, a captured image is outputted through a first and second interface means and a communication card to a host computer (112). However, Yamagami in view of Kuroiwa does not state that the image data is sent to an Internet service provider.

Crawford discloses in figure 1 a computer (50) capable of connecting to an online Internet service provider (100). The online Internet service provider (100) provides various capabilities such as data storage to the customer computer (50) (col. 14, lines 17-35). Figure 2 shows in block 202 offsite archival services preformed by accessing virtual disk drives. Customer files from the customer computer (50) inactive for a

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specified period are automatically copied to online service disks for offsite archiving (col. 14, lines 45-60). Therefore, it would have been obvious to include the offsite archival service performed by accessing virtual disk drives located at an online Internet service provider connected to a customer computer as disclosed by Crawford in the host computer capable of receiving image data as disclosed by Yamagami in view of Kuroiwa. Doing so would provide a means of transferring files located at a customer computer to an online Internet service provider (Crawford: col. 14, lines 45-50).

Re claim 73, Crawford states that the Internet service provider may include America On-line (col. 2, lines 5-22).

Re claim 43, see claim 72.

Re claim 44, see claim 73.

Allowable Subject Matter

Claims 23-24, 26-28, 52-53 and 55-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Re claims 23 and 52, the prior art fails to teach or suggest, "A digital image capturing system including a digital image capturing device, comprising: a lens; an electronic image pick-up which receives images through the lens; a processor connected to the electronic image pick-up; a first input/output interface connected to the processor; a second input/output interface connected to the processor and configured to receive a card that stores a control program; and a memory configured to receive the control program from the card, wherein the processor is configured to control the card through the second input/output interface, and is configured to transfer the control program to the memory, the control program including a communication control program executable on the processor for controlling the first input/output interface, **and wherein the communication control program is configured to enable communication with an external device through the first input/output interface, wherein the second input/output interface is configured to receive a communication card that is a modem card**".

Re claims 24 and 53, the prior art fails to teach or suggest, "A digital image capturing system including a digital image capturing device, comprising: a lens; an electronic image pick-up which receives images through the lens; a processor connected to the electronic image pick-up; a first input/output interface connected to the processor; a second input/output interface connected to the processor and configured to receive a card that stores a control program; and a memory configured to receive the control program from the card, wherein the processor is configured to control the card

through the second input/output interface, and is configured to transfer the control program to the memory, the control program including a communication control program executable on the processor for controlling the first input/output interface, **and wherein the communication control program is configured to enable communication with an external device through the first input/output interface, wherein the second input/output interface is configured to receive a communication card which is a local area network (LAN) card**".

Re claims 26-27 and 55-56, the prior art fails to teach or suggest, "A digital image capturing system including a digital image capturing device, comprising: a lens; an electronic image pick-up which receives images through the lens; a processor connected to the electronic image pick-up; a first input/output interface connected to the processor; a second input/output interface connected to the processor and configured to receive a card that stores a control program; and a memory configured to receive the control program from the card, wherein the processor is configured to control the card through the second input/output interface, and is configured to transfer the control program to the memory, the control program including a communication control program executable on the processor for controlling the first input/output interface **and wherein the communication control program is configured to enable communication with an external device through the first input/output interface, further comprising an input/output card, configured to be connected to the second interface, which contains an input/output protocol controller**".

Re claims 28 and 57, the prior art fails to teach or suggest, "A digital image capturing system including a digital image capturing device, comprising: a lens; an electronic image pick-up which receives images through the lens; a processor connected to the electronic image pick-up; a first input/output interface connected to the processor; a second input/output interface connected to the processor and configured to receive a card that stores a control program; and a memory configured to receive the control program from the card, wherein the processor is configured to control the card through the second input/output interface, and is configured to transfer the control program to the memory, the control program including a communication control program executable on the processor for controlling the first input/output interface **and wherein the communication control program is configured to enable communication with an external device through the first input/output interface, further comprising an input/output card, configured to be connected to the second interface, having a communication a communication line connected thereto**".

Claims 75 and 82-87 are allowed.

The following is an examiner's statement of reasons for allowance:

Re claim 75, the prior art fails to teach or suggest, "A digital image capturing system including a digital image capturing device, comprising: a lens; an electronic

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image pick-up which receives images through the lens; a processor connected to the electronic image pickup; at least two input/output interfaces connected to the processor, and at least one of the input/output interfaces is further configured to receive a control program stored on a card; a memory configured to receive the control program from the card through one of the input/output interfaces, wherein the processor is configured to transfer the control program to the memory through the one of the input/output interfaces and **execute the received control program in the memory to communicate with an external device through a different input/output interface in the at least two input/output interfaces that is different than the one of the input/output interfaces through which the control program is received**".

Additionally, as a result of the terminal disclaimer filed on 2/7/2007 a double patenting rejection in view of US 5,754,227, US 6,104,430 and US 6,300,976 cannot be made.

Re claims 82-87, the prior art fails to teach or suggest, "A digital camera, comprising: a lens; an electronic image pick-up which receives images through the lens; a processor connected to the electronic image pickup; **a first input/output interface connected to the processor and configured to receive through an external communication line a control program including instructions that are executable by the processor**; a second input/output interface connected to the processor and configured to be connectable to a removable memory card which stores images captured by the electronic image pick-up; **a memory configured to receive the control program from the first input/output interface and store the control**

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program, wherein the processor is configured to execute the instructions in the received control program stored in the memory in order to control the digital camera". Additionally, as a result of the terminal disclaimer filed on 2/7/2007 a double patenting rejection in view of US 5,754,227, US 6,104,430 and US 6,300,976 cannot be made.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on **(571) 272-7372**. The fax phone number for submitting all Official communications is **(571) 273-7300**. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at **(571) 273-7312**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ



LIN YE
SPE. ART UNIT 2622